SAFGRAD PROGRAMME ASSESSMENT

GUIDE FOR THE COLLECTION AND TRANSMITTAL OF THE ASSESSMENT DATA.

The tables and other formats, as well as the procedures for the collection and analysis of the information needed for the SAFGRAD Programme Assessment, were developed by the Assessment Team assembled by AID for this purpose, in collaboration and with the concurrence of: a) the Steering Committees of the four commodity networks; b) the representatives of the IITA and ICRISAT research centres; c) the Network Coordinators and d) the SAFGRAD Coordination Office (SCO). In turn, the Assessment Team consisted of: the SAFGRAD Research Director; a Senior Agricultural Economist, and a USAID Research Analyst.

1. The basic unit of data collection will be the NARS Scientists, who thus constitute the respondents. Each table has a space for the scientist's (respondent's) name.

2. Data collection forms will be sent to one NARS contact person for each crop in each country, who will be responsible for their distribution and retrieval when completed. The contact person would normally be the country coordinator.

3. The NARS contact person will then send the forms to all of the scientists in the country that are engaged in research on the commodity in question. The contact person may also fill a set of forms.

4. As soon as possible after receiving the forms from the contact person, the respondent will be visited by the contact person and by the Assessment Team.

5. The respondent should forward the completed forms back to the contact person by August 15, 1992.

6. The contact person will in turn send the forms back to the Network Coordinator who would be responsible for forwarding them to the Assessment Team for complilation and analysis.

7. All experiments that have been completed on the crop should be included in the data collection forms, whether supported by SAFGRAD or not.

8. Only the experiments on which the respondent worked or for which he or she had responsibility, should be reported. The non-applicable tables should be left blank.

9. When the information requested is not directly obtainable by the respondent (such as on-farm trials or seed multiplication and distribution), as when the activities are carried out by other units or institutions, the respondent should either collect the information through his/her contacts elsewhere, or inform the Contact Person immediately, in order to ensure follow-up and completion of the forms.

10. There are 10 tables. a) the first 4 track the flow of germplasm from all sources, indicating its destination for each stage of development, right up to on-farm demonstrations; b) tables 5 and 6 track all other experiments, including agronomy, entomology, pathology, post harvest, etc. both on-station and on-farm, respectively; c)tables 7 and 8 track yield increases of the best potential variety per year in advanced and on-farm yield trials, respectively; d)table 9 tracks technologies, varieties, and packages released to farmers; and e) table 10 tracks seed multiplication and distribution.

11. Respondents may need to send Tables 6, 8 and 9 to an on-farm unit or farming systems unit, and Table 10 to a seed multiplication unit, or to NGOs involved in this activity.

12. The completion of some of the tables may require some time to look into backlog of research records, field data books, and National Annual or Biannual Commodity Research Progress Reports. The data requested will be essential for justifying future donor support to Agricultural Research in sub-Saharan Africa.

13. The earliest year for which data should be provided will depend on the initiation of each country's national programme. Some national programmes did not begin until the mid 1980s, while others have been in existance since the 1970s. In any event, data collection for the SAFGRAD Programme Assessment should date back to 1982, whenever possible, given that the period of reference of the exercise is 1982-1992.

July 20, 1992.

GUIDE FOR FILLING TABLES 5 AND 6

Agronomic Trials

- Dates of planting
- Plant population density
- Weed control
- Control of parasitic weeds
- Mineral fertilizers
- Organic fertilizers
- Crop rotation
- Crop harvesting techniques
- Maize-cowpea relay cropping
- Sorghum-cowpea intercropping
- Millet-cowpea intercropping
- Fertilization in mixed cropping
- Soil tillage (hand-hoeing, animal and tractor ploughing)
- Zero-tillage, zero-tillage with *in situ* mulch
- Tied ridging
- Management of terraces
- Alley cropping
- Cropping on contour lines
- Agronomic production package
- Integrated crop management
- Mixed farming (crop and livestock raising)

Entomological trials and bird control

- Bionomics of insect pests
- Insect pest population dyanamics
- Evaluation of yield losses due to insect pests
- Host-plant insect pest resistance
- Minimum insecticide treatment
- Chemical control of insect pests
- Biological control of insect pests
- Cultural control of insect pests
- Insect repellant .
- Bird control

Pathological Trials

- Biology of pathogenes
- Disease epidemics
- Evaluation of losses due to diseases.
- Host plant resistance studies
- Biological control
- Cultural control
- Chemical control

Processing and handling of post-harvest produce

- Threshing techniques
- Storage techniques and structures
- Processing of produce for:
  - .. human food
  - .. animal feed
- Post-harvest losses
- Coditioning of produce for marketing.
  - .. pure flour
  - .. substitute flour
  - .. composite flour (or mixed flour).

EARSAM Network SORGHUM Germplasm Flow Table 1

Scientist Name:	Country:

Names of Research Field Stations or Locations where you plant trials or perform experiments:

1. 2. 3. 4.

5. 6. 7. 8.

Activities	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
1. Local Germplasm Collection & Evaluation											
Number of accessions collected & planted											
Number of accessions selected											
Number of selections later used in breeding program											
Number of selections promoted to yield trials											
2. Introduced Germplasm											
2.1 International Germplasm Trials from ICRISAT											
Number of trials											
Total number of ICRISAT entries planted											
Total number of entries selected from all trials											
Number of selections later used in breeding program											
Number of selections promoted to yield trials											
2.2 SAFGRAD Regional Trials											
Total number of entries selected from all trials											
Number of selections later used in breeding program											
Number of selections promoted to yield trials											
2.3 Bilateral introductions directly from other NARS											
Name the NARSs*											
Total number of other NARS accessions planted											
Number of accessions selected											
Number of these selections used in breeding program											
Number of selections promoted to yield trials											
3. Accessions/Lines Contributed to Others											
Number of Accessions/Lines you sent to ICRISAT											
Number of Accessions/Lines you sent to SAFGRAD											
4. Breeding Crosses/Nurseries											
Constraint:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											

Name of NARSs*: BI=Burundi, BA=Botswana, BN=Benin, BF=Burkina Faso, CM=Camercon, CR=C.A.R., CI=Cote d'Ivoire, CV=Cape Verde, ET=Ethiopia, GA=Gambia, GH=Ghana, GN=Guinea, GB=Guinea Bissau, KE=Kenya, ML=Mali, MN=Mauritania, NI=Niger, NA=Nigeria, SE=Senegal, SL=Sierra Leone, SO=Somalia, SU=Sudan, TC=Tchad, TZ=Tanzania, TO=Togo, ZM=Ambia, UG=Uganda

Sources of Information used to fill this table:

EARSAM Network SORGHUM Germplasm Flow Table 2

Scientist Name:	Country:

Activities	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
4. Breeding Crosses/Nurseries (continued from table 1)											
Constraint*:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Constraint:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Constraint:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Constraint:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Constraint:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Constraint:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Constraint:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											

* Constraints Examples: Earliness, Insect/Disease Resistance, Drought Tolerance, Yield Potential, Processing, Utilization, Micronutrient Deficiency, etc...

Sources of Information used to fill this table:

EARSAM Network SORGHUM Germplasm Flow Table 3

Scientist Name:	Country:

Activities	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
4. Breeding Crosses/Nurseries (continued from table 2)											
Combined Constraints:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Combined Constraints:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
Combined Constraints:											
Number of crosses made											
Number of entries planted in nursery											
Number of entries selected											
Number of progenies promoted to yield trials											
5. Preliminary Yield Trials											
Number of trials											
Total number of entries planted											
Number of entries selected											
Number of entries promoted to advanced yield trials											
6. Advanced Yield Trials											
Number of trials											
Total number of entries planted											
Number of entries selected											
Number of entries promoted to multilocation yield trials											
7. Multilocation Trials											
Number of trials											
Total number of entries planted											
Number of entries selected											
Number of entries promoted to elite variety yield trials											

Sources of Information used to fill this table:

EARSAM Network SORGHUM Germplasm Flow Table 4

Scientist Name:	Country:

Activities	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
8. Elite Variety Trials											
Number of trials											
Total number of entries planted											
Number of entries selected											
Number of entries promoted to on-farm verification trials											
9. On Farm Verification Trials											
Researcher Managed											
Number of trials											
Total number of entries planted											
Number of entries selected											
Number of entries promoted to farmer managed yield trials											
Farmer Managed											
Number of trials											
Total number of entries planted											
Number of entries selected											
Number of entries promoted to on-farm demonstrations											
10. On Farm Demonstrations											
Number of variety demonstrations planted											
Total number of varieties demonstrated											

Sources of Information used to fill this table:

EARSAM Network SORGHUM ON STATION EXPERIMENTS Table 5

Photocopy this sheet if you need extra copies.

Agronomic, Entomology, Pathology, & Other Experiments Completed On Station

Scientist Name:	Country:

Activities	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
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Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											

Sources of Information used to fill this table:

EARSAM Network SORGHUM

ON-FARM EXPERIMENTS

Table 6

Photocopy this sheet if you need extra copies.

Agronomic, Entomology, Pathology, & Other Experiments Completed On-Farm

Scientist Name:	Country:

Activities	1982	1983	1984	1985	1986	1987	1988	1989	1990	1991	1992
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
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Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											
Experiment Name:											
Number of trials											
Number of treatments											
Percentage change in yield											

Sources of Information used to fill this table:

EARSAM Network SORHGUM

ADVANCED YIELD TRIALS

Yield/Quality Potential of Varieties in Advanced Yield Trials

Table 7

Scientist Name:	Country:

Year*	Entry Name (List only the Best Variety for each yield trial for each year the trial was performed)	Percentage Yield Increase of this Variety over Local Farmers' Best Variety	What Desirable Traits* this Variety was Selected for	Original Source(s)** of Germplasm for this Variety	Yield Stability Good, Fair, or Poor
1982					

Years*: 1982–1992

* Desirable Traits: Earliness, Insect/Disease Resistance, Drought Tolerance, Yield Potential, Processing, Utilization, Micronutrient Deficiency, etc...

** Sources = Local, SAFGRAD, ICRISAT, Name of NARS within the Network, Name of NARS outside the Network.

Sources of Information Used to Fill this Table:

Yield/Quality Potential of Varieties in Advanced Yield Trials

Scientist Name:	Country:

Year*	Entry Name (List only the Best Variety for each yield trial for each year the trial was performed)	Percentage Yield Increase of this Variety over Local Farmers' Best Variety	What Desirable Traits* this Variety was Selected for	Original Source(s)** of Germplasm for this Variety	Yield Stability Good, Fair, or Poor
1982					

Years*: 1982–1992

* Desirable Traits: Earliness, Insect/Disease Resistance, Drought Tolerance, Yield Potential, Processing, Utilization, Micronutrient Deficiency, etc...

** Sources = Local, SAFGRAD, ICRISAT, Name of NARS within the Network, Name of NARS outside the Network.

Sources of Information Used to Fill this Table:

EARSAM Network **SORGHUM** **Improved Varieties/Technologies/Packages Released** Table 9

Scientist Name:	Country:

Year*	Original Name or Designation of Variety or Technology	Variety or Technology Released under What Name in Your Country	Percentage Yield Increase of this Variety/Technology over Local Farmers' Best Variety/Technology	Yield Stability Good, Fair or Poor
1982				

*Years: 1982–1992

Describe the Variety Release or Technology Recommendation to Farmers Process in your country here:

Describe the Technologies or Packages:

Sources of Information Used to Fill this Table:

EARSAM Network SORGHUM

Seed Multiplication and Distribution

Table 10

Name of Person Filling This Form:	Name of Unit or Group Multiplying Seed:	Country:

Year*	Kilograms of Seed Obtained	Seed Variety Name or Designation	Source Where You Received This Seed From	Kilograms of Seed Produced	Kilograms of Seed Distributed	Price per Kilogram	Number of Recipients
1982							

Years*: 1982–1992

Sources of Information Used to Fill This Table:

1992

SAFGRAD PROGRAMME ASSESSMENT, GUIDE FOR THE COLLECTION AND TRANSMITTAL OF THE ASSESSMENT DATA

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